Summary of Public Scoping Comments Received During the Scoping Period for the Outer Continental Shelf Renewable Energy and Alternate Use Programmatic Environmental Impact Statement

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Minerals Management Service
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FIGURE

NOTATION

AERU	alternate energy related use
DOE	Department of Energy
DOI	Department of the Interior
EMF	electromagnetic field
EP Act	Energy Policy Act
FWS	Fish and Wildlife Service
LIPA	Long Island Power Authority
MMS	Mineral Management Service
NEPA	National Environmental Policy Act of 1969
NOAA	National Oceanographic and Atmospheric Administration
NOI	Notice of Intent
NPS	National Park Service
OCS	outer continental shelf
OCSLA	Outer Continental Shelf Lands Act
PEIS	programmatic environmental impact statement
USGS	United States Geological Survey

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1 INTRODUCTION

The Energy Policy (EP) Act of 2005, Public Law 109-58 (H.R. 6), enacted August 8, 2005, contains provisions related to offshore resource management of the outer continental shelf (OCS), including renewable energy development and alternate use of existing infrastructure. Under the EP Act, the Secretary of the Interior has authority to issue a lease, easement, or right-of-way on the OCS for activities that (1) produce or support production, transportation, or transmission of energy from sources other than oil and gas; or (2) use facilities (e.g., oil platforms) currently or previously used for activities authorized under the OCS Lands Act (except that any oil and gas energy-related uses shall not be authorized in areas prohibited by a moratorium). Subsequent to passage of the Energy Policy Act, the Secretary designated OCSLA authority to the Mineral Management Service (MMS), a bureau of the Department of Interior.

A Notice of Intent (NOI) to prepare the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS* was published in the *Federal Register* on May 5, 2006. This NOI invited interested members of the public to provide comments on the scope and objectives of the PEIS, including identification of issues and alternatives that should be considered in the PEIS analyses. The MMS conducted scoping for the PEIS from May 5, 2006, through July 5, 2006.

This report presents a summary of the comments that were received during the scoping period for consideration in preparing the PEIS. The MMS will use this report and the individual comments as part of a process to determine the scope of analysis in the programmatic EIS. Specific comments and their context are not presented here; only the relevant issues raised in those comments as they apply to preparation of the PEIS are presented. All comments, regardless of how they were submitted, will receive equal consideration in the development and conduct of the PEIS.

Copies of all written scoping comments submitted either by mail, via an online comment form, or in person at public meetings are available on the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS* Web site (http://ocsenergy.anl.gov/index.cfm).

2 SCOPING PROCESS

2.1 APPROACH

The public was provided with three methods for submitting scoping comments or suggestions on the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS*:

- Via the online comment form on the project Web site,
- By mail, and
- In person at public scoping meetings.

Public scoping meetings were held at ten locations in May and June 2006: Herndon, Virginia (May 18); Trenton, New Jersey (May 23); Austin, Texas (May 23); Melville, New York (May 24); Dedham, Massachusetts (May 25); Long Beach, California (May 25); Atlanta, Georgia (June 6); Portland, Oregon (June 6), Orlando, Florida (June 8); and San Francisco, California (June 8) (Figure 1). At each meeting, the MMS presented background information about the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS*, and representatives from the Department of Energy (DOE) National Renewable Energy Laboratory presented information about various technologies. The presentation materials from these meetings, including slides, maps depicting the various planning area boundaries, and white papers for the technologies being considered, are available on the project Web site: (http://ocsenergy.anl.gov/index.cfm).

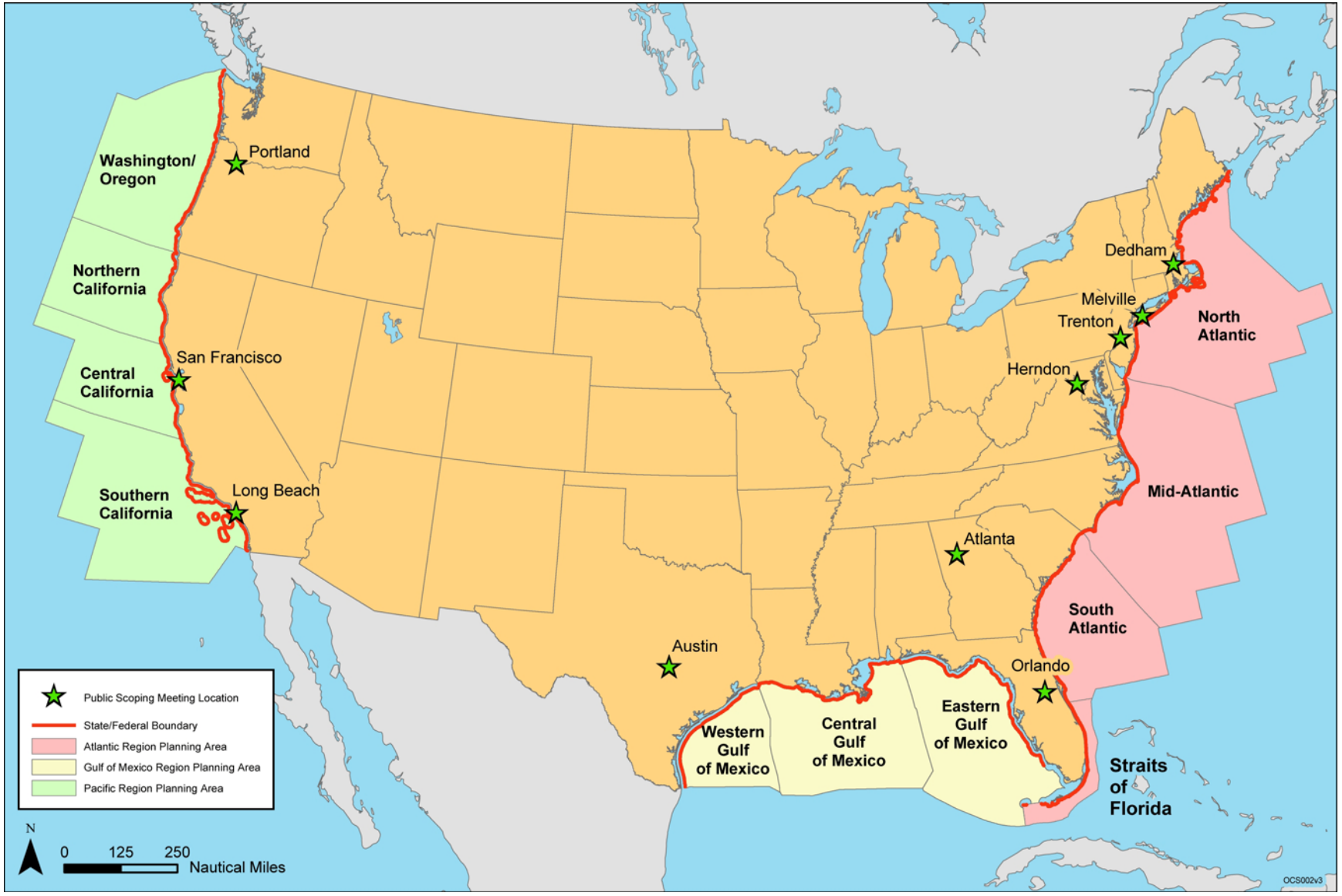

FIGURE 1 OCS Planning Areas and Scoping Meeting Locations

2.2 SCOPING STATISTICS

Nearly 235 individuals, organizations, and government agencies provided comments on the scope of the PEIS by testifying at public scoping meetings, submitting comments via the project Web site, or by submitting comments by mail. Some people used more than one method to submit comments. Nearly 100 comment documents were received from individuals. In addition, comments were received from four federal agencies, sixteen state agencies, three local government organizations, and over 70 other organizations, including environmental groups, interest groups, and industry.

More than 270 people registered their attendance at the public scoping meetings held during May and June 2006. The Dedham, MA meeting drew the most people (n = 98), followed by Long Island, NY (n = 76). One hundred eight individuals provided oral comments at one or more of the public meetings. Nearly 125 comment documents were received via the project online comment form; nineteen were received by mail.

Comment documents were received from 26 states, the District of Columbia, and Canada. Approximately 75% originated from states within the study area. Massachusetts (n = 49) and New York (n = 23) provided the most comments.

Federal Agencies that provided comments were:

National Park Service
U. S. Coast Guard
U.S. Dept of Commerce, National Oceanic and Atmospheric Administration
U.S. Dept of the Interior, Fish and Wildlife Service, New England Field Office

State Agencies that provided comments were:

Florida Department of Environmental Protection
Hawaii Department of Business, Economic Development, and Tourism
Massachusetts Division of Marine Fisheries
Massachusetts Attorney General (Sec. of Environmental Affairs) representing Governor Romney
New Jersey Department of Environmental Protection
New York Department of Environmental Conservation
New York Department of State
Virginia Dept of Environmental Quality
Washington State Department of Fish and Wildlife
Washington State Department of Community, Trade, and Economic Development, Energy Policy Division
Washington State Department of Ecology, Coastal Zone Management Program
Washington State Department of Ecology, Hydropower, Water Quality Program
Washington State Department of Fish and Wildlife
Washington State Dept of Natural Resources
Washington State Governor's Office of Regulatory Assistance

Local agencies that provided comments were:

Barnstable County Assembly of Delegates
Lincoln County Oregon
Woods Hole, Martha's Vineyard, Nantucket Steamship Authority

3 SUMMARY OF SCOPING COMMENTS

Issues discussed in comments received during the public scoping period for the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS* were divided into two major categories: (1) issues pertaining to development of renewable energy (e.g., wind power) on the OCS; and (2) issues associated with alternate use of existing facilities on the OCS. Many of the comments addressed issues in more than one of these categories. The comments are discussed in separate sections below.

Issues within the scope of the PEIS included questions and concerns regarding the environmental and socioeconomic impacts of OCS development, sources and amounts of power required for development, technologies to be used, mitigation of impacts, cumulative impacts, and stakeholder participation in the National Environmental Policy Act (NEPA) process. The summary for comments on renewable energy is organized into the following main topics: environmental concerns, socioeconomics, siting and technology concerns, stakeholder involvement, cumulative impacts, mitigation, policy, alternatives, and other issues. Comments for alternate use of existing facilities were fewer and are not in subcategories.

A summation of the scoping comments, both oral and written, is presented in Sections 3.1 and 3.2. Interested persons can view individual comments on the project Web site (http://ocsenergy.anl.gov/index.cfm).

3.1 COMMENTS ON RENEWABLE ENERGY ON THE OCS

3.1.1 ENVIRONMENTAL CONCERNS

The following text describes the main categories encompassing environmental concerns identified by commentors.

Monitoring and Data Collection. The adequacy of monitoring and data collection to support environmental reviews was a concern expressed by many commentors. Comments included requests that MMS set up adequate ongoing studies and monitoring of bird and other populations to allow determination of impacts, and allow for ongoing mitigating actions if unforeseen adverse impacts are noted during construction and operations. Three-year studies were requested. Methods including aerial surveys, boat surveys, predator-prey investigations, ocean-based radar, remote sensing, historic records, and use of European data were suggested. The use of best-available monitoring technologies was requested, as these would detect many more organisms than older technologies. It was suggested that funding for monitoring studies could come from the Renewable Energy portion of the EP Act.

It was stated that a minimum data collection requirement for individual pilot and commercial scale renewable energy projects should be established, including items such as timelines for major migratory routes of birds and marine fauna, benthic surveys, and identification of other in-service and proposed projects that would impact the various areas.

There were requests to include maps of all coastal and ocean parks and national marine sanctuaries.

Another commentor stated that data requests should be site-specific, reasonable, and aimed at answering specific questions.

Air Quality and Global Warming. The positive impacts of developing renewable energy sources (in terms of decreasing hazardous air pollutant and greenhouse gas emissions from fossil fuels) were discussed in many comments. These environmental advantages were felt by the commentors to be the primary reason for quickly leasing and licensing appropriate OCS areas to renewable energy facilities. There were requests that these emission decreases be included in impact analyses, and that possible increased compliance with federal air quality standards due to decreased levels of particulate matter and ozone should be discussed.

Ecology and Marine Life. Many commentors had concerns about whether OCS renewable energy technologies, especially wind energy, would have short- or long-term adverse impacts on migratory birds, bats, insects (e.g., butterflies, dragonflies), or on marine species (e.g., sea turtles, large mammals, horseshoe crabs, clams, benthic species). Habitats of concern include deep-water habitat, coral reefs, coastal marshes, mangroves, and sea grass beds. It was suggested that impacts on birds and other species should be compared with impacts from a fossil fuel generating facility of equal energy capacity on land.

For migratory birds, it was stated that extensive research on potential impacts is needed prior to large investments in infrastructure. Impacts of turbine speed and lighting need to be assessed, and impacts to species protected under the Migratory Bird Treaty Act should be especially avoided. Operations would likely need to be restricted during peak migratory periods (which can be lengthy portions of spring and fall). Special concern was expressed concerning wind turbines in the Gulf of Mexico, which was stated to be a migration route for millions of birds per day in the spring. There were requests to investigate the possibility of large bird kills during bad weather and wind conditions.

Comments were received requesting that the PEIS address impacts to marine life, such as adverse effects on coral, marine habitat, and threatened and endangered species. Other concerns included possible electromagnetic field (EMF) effects from subsurface transmission lines, effects of shadows from wind turbine rotor blades, impingement and entrainment of juvenile fish, eggs and larvae,

It was requested that MMS work cooperatively with other agencies having expertise in marine life ecology, including the United States Fish and Wildlife Service (FWS), pertinent National Oceanographic and Atmospheric Administration (NOAA) agencies, wildlife conservation agencies of the Gulf coast states, and qualified research ornithologists from the United States Geological Survey (USGS) and academic institutions. It was stated that no development should occur in areas designated as protected by these agencies, or in critical habitat areas.

It was stated that new structures on the OCS could provide advantages for fisheries because wind turbine foundations would have a dual use as habitat for fish.

Visual Impacts. Some commentors were very concerned over adverse visual impacts from facilities located on the OCS, while other commentors stated that the visual impacts would be very minimal from such facilities. Impacts to the night sky from lighting of turbines were a concern. It was requested that visual impacts in parks or recreational areas be avoided.

Noise and Vibration. It was requested that noise and vibration impacts on marine species from construction and operation of power generators, wind turbines, and other equipment be evaluated. A commentor noted that if certain species avoided facilities because of aversion to noise, they could be denied good habitat.

Waste Generation and Disposal. It was noted that wind power has the advantage of not using or generating hazardous waste or emissions. However, it was stated that storage quantities of hazardous chemicals (e.g., oils and lubricants) in OCS facilities should be limited.

One commentor noted that all large-scale wind facilities have associated transformer oil facilities that store 40,000 gallons or more of oil. It was requested that oil spill trajectories and impacts from a spill from such a facility be evaluated (e.g., impacts in Nantucket Sound).

A concern was raised pertaining to construction-related resuspension of contaminated dredge spoil that had previously been disposed of on the OCS. It was requested that known dredge material disposal sites should be identified and avoided.

Water Quality. Concerns were expressed over adverse water quality impacts if oil stored at wind facilities were accidentally released (see above). One commentor stated that impacts to island fresh water supplies should be considered where applicable.

Environmental Justice. It was stated that the positive environmental justice impacts of renewable energy-related uses should be considered. For example, the use of renewable energy sources would decrease non-renewable energy generation. Since non-renewable energy sources disproportionately burden the public health and environmental quality of low-income and minority communities, their decreased use would cause a positive impact.

Concern was expressed over negative environmental justice impacts to Native American fisheries in Washington State.

Other. Concerns included impacts to structures from severe weather events (e.g., such as increased risk of shipwrecks, release of hazardous substances); impacts of technologies, facilities, and dredging on sand and sediment deposition (i.e., littoral drift); changes in barrier beaches; and impacts of projects on sea level rise. It was recommended that a mitigation fund for conservation of habitat be established for individual project sites.

3.1.2 SOCIOECONOMICS

Some commentors requested that the economic impacts of renewable energy projects on other commercial activities conducted on the OCS (e.g., commercial and recreational fishing, shipping, tourism) be evaluated. It was requested that cost-benefit analysis, including the source and cost of backup power, be looked at. Other recommendations included assessment of life-cycle costs, including dismantling of facilities; impacts on electricity rates and reliability; addressing impacts on cultural resources (e.g., shipwrecks, prehistoric/historic settlements and burial grounds at on-shore facilities). The positive as well as potential negative socioeconomic impacts of renewable energy facilities on surrounding communities should be assessed.

It was stated that the economics of electricity generation are less robust than those of oil and gas production; therefore, the industry would not be able to tolerate high royalty fees.

3.1.3 SITING AND TECHNOLOGY CONCERNS

Siting. Comments stated that the PEIS should identify those locations containing the greatest renewable energy potential for each technology. Additionally, many commentors requested that not only technological factors (e.g., water depth and wind speeds) but also environmental factors (e.g., bird and marine mammal migration patterns) and socioeconomic factors (e.g., impacts on fisheries, shipping, recreational use) be considered in designating appropriate areas for renewable energy facilities on the OCS. A commentor noted that the North Atlantic Planning Area (Figure 1) was very well suited for development of offshore wind power, because of the shallow depth of the water, strong winds, ease of grid connections, and proximity to large population centers.

The need for a site-specific EIS for each renewable energy project was sited by many commentors. It was stated that State and local governments should have input to siting decisions.

It was requested that siting be done in a manner to avoid impacts to municipal, state, and national parks. sites listed in the National Registry of Historic Places, and Marine Protected Areas (under Executive Order 13158). The potential impacts of public access to or exclusion from the facilities should be discussed.

Power Generation. The technical feasibility of power generation and integration of any generated power into the grid system was questioned by many commentors. Questions were raised as to the actual efficiency of wind turbines; that is, since the turbines use electric motors to keep them rotating even when wind speeds are not adequate to do so, is their net electrical output sufficient to justify the investment? It was stated that the energy efficiency and output calculations should factor in the fuel required for the vessels that maintain the renewable energy facilities on the OCS. Requests were made to provide accurate estimates of the power output for each technology considered (i.e., wind, wave, current, and solar), and compare these outputs with those of conventional fossil-fuel fired power plants.

Technology. Requests were made to include background information on the technologies, especially non-wind technologies, because these renewable technologies are newer and potential impacts are not well known. Commentors expressed concern over the impacts from various possible technologies, such as the impacts from displaced wave energy.

There were suggestions that options for the multiple uses of renewable energy infrastructure (e.g., tidal, wave, and wind power generation from a single structure; combinations of wind and gas combustion turbines) be investigated. One commentor advocated for development of hydrogen-producing facilities, stating that technologies are available for megawatt-sized hydrogen-generating electrolysis facilities. Another requested that the PEIS include information on application of the use of vortex energy applied to ocean currents, especially at the junction of warm and cold currents.

It was stated that impacts to military and civil aviation need to be addressed, because wind farms can interfere with radar systems and navigational aids.

The PEIS was requested to evaluate different technology designs and mandate use of designs that limit impacts to wildlife. A technology that should be included in the PEIS review is harvesting of marine biomass methane.

Economic Feasibility. A number of commentors expressed concerns that prior to permitting, the economic viability of various renewable energy technologies needed to be assessed as well as the environmental impacts. However, it was also stated that MMS should adopt the economic review standard of the Army Corps of Engineers, which states that it will be assumed that proposals are economically viable (since financing institutions would not otherwise provide backing).

3.1.4 STAKEHOLDER INVOLVEMENT

Commentors requested intergovernmental collaboration and community input and participation. It was requested that the MMS work with other federal and state agencies so that the permitting process for projects on the OCS could be coordinated, preferably one process for all required federal permits and a coordinated process for state permits. For example, transmission lines in state-managed waters will require permitting through state agencies. Establishing procedures to work toward consistency with federal, state, and local government policies was also requested. It was requested that the roles and responsibilities of local, state, and federal agencies in renewable energy projects be clearly defined. It was stated that Federal and State review processes must be incorporated into project schedules, even if the time to project start is increased.

3.1.5 CUMULATIVE IMPACTS

Commentors stated that the cumulative impacts assessment should consider impacts if multiple facilities using several different technologies are located within relative proximity to

one another, as well as other current uses of the OCS. There was a caution that concurrent developments should be avoided unless good evidence exists that cumulative impacts would not be a concern, which could be difficult to demonstrate because such impacts might not be known immediately.

3.1.6 MITIGATION

Many commentors requested that the PEIS address mitigation measures (specific to each renewable energy use) for minimizing effects on coastal resources. It was also requested that opportunities for project enhancements (e.g., beneficial use of dredged materials, creation of artificial reefs, habitat restoration) be identified. Examples of mitigation measures suggested included shut-down of wind turbines during peak bird migration periods, use of acoustic deterrents during construction to warn marine mammals away from the vicinity, and lighting of structures to aid navigation (although the lighting might have other unintended effects on birds).

3.1.7 POLICY

Commentors identified a number of policy-related issues, including the following:

- Development of a national policy for leasing OCS areas for renewable energy production.
- Competition between technologies on an economic basis.
- Decreasing dependence on foreign oil sources.
- Establishing funded decommissioning plans.
- Whether renewable energy projects would be treated more leniently than other OCS development activities. The current enthusiasm for renewable energy sources should not lead to hasty decisions without adequate research on impacts. Pilot projects need to demonstrate efficiency. If a specific project shows high adverse environmental impacts, no permit should be granted.
- Evaluation of areas currently designated as exclusion areas (e.g., national or state parks or marine sanctuaries) to see if renewable energy projects would be feasible to operate with little environmental damage.
- A request to include the Hawaiian OCS as a planning area in the PEIS.
- MMS needs to support renewable energy technology development in ways similar to past support of oil and gas development; for example, through funding environmental studies of high-energy potential areas, deferring royalty collection until after costs are recovered, and through aiding smaller companies with the permitting process. One commentor went further to suggest no royalties or fees until a technology reached 2% of the total U.S. electric demand.
- U.S. government should bear the cost of required environmental surveys until a technology is profitable.
- MMS should not favor wind energy over developing water-based energy technologies.

3.1.8 ALTERNATIVES

One commentor pointed out that the Notice of Intent did not define the proposed action, no action, or action alternatives. This commentor suggested that the PEIS should clearly identify the types of alternate energy related use (AERU) developments that might be located on the OCS, and that the PEIS alternatives should support a regulatory program for different production levels (i.e., research and development, pilot scale, and commercial scale) for each of these development types. Another commentor suggested evaluation and permitting by scale of power production (e.g., <1 MW, 1 – 10 MW, greater than 10 MW) and presence of a grid connection.

One commentor suggested that the no action alternative include a cost comparison between other sources of electricity and the renewable sources that the PEIS will address. For example, it was requested that the cost of generating one kilowatt hour from renewable sources be compared with generating the power from oil, natural gas, coal, and nuclear sources. It was requested that analyses include near-term costs and long-term (e.g., decommissioning) costs.

3.1.9 OTHER ISSUES

Other comments and issues raised include:

- Concern over the broad scope of the PEIS and the ability to adequately evaluate impacts of many different renewable energy project types. There were recommendations to restrict the scope of the PEIS to technologies and geographic locations feasible for development in the near future (e.g., restrict to only shallow water areas for wind power facilities).
- Competing permit applications for the same area: suggestion that there be requirements that construction begin within specified time-frame of permit approval.
- Interference with military training and testing areas in the Eastern Gulf of Mexico.
- Assessment of whether the new projects would meet State, Regional or National regulations, codes, or laws.
- Concerns over length of time required to lease and permit new renewable energy facilities; encouraged to streamline the process. MMS is urged to establish a simple permitting process for short-term, geographically limited activities (e.g., site and resource assessments).
- Establishment of a qualified independent review panel.
- Local governments should have input on the revenue sharing formulas that are established.
- Request that MMS immediately provide special programs to install a limited number of offshore test wind turbines so that needed data can begin to be collected.
- Positive and negative comments on the Cape Wind Project and the Long Island Power Authority (LIPA) Project (these projects are considered out-of-scope since separate NEPA documents have been prepared for them).
- Development of a Consistency Determination for Virginia Coastal Resources.

3.2 COMMENTS ON ALTERNATE USE OF EXISTING FACILITIES

Use of the existing oil and gas platforms on the OCS for aquaculture was recommended in several comments, because many of the problems with aquaculture at existing, near-shore facilities could be reduced or eliminated. It was stated that OCS aquaculture facilities would provide substantial benefits, including large volume of water, better water quality, and minimizing user conflicts. Suggestions regarding regulatory oversight, length of operations, appropriate fees, etc. were also provided. It was stated that public health and welfare benefits, such as decreased reliance on foreign imports, health benefits from increased fish consumption, increased employment, and favorable energy balance (in comparison with on-shore aquaculture facilities) should be considered in the analyses.

There were also comments about the potential negative impacts from aquaculture (e.g., escape of non-native populations, introduction of parasites & disease in wild populations, decreased availability of fish meal and fish oil used as feed for farmed species (concern for both human use and use as food for larger fish, marine mammals, and seabirds), impacts from use of drugs, antibiotics, and pesticides, negative socioeconomic impacts on fishing communities). Concern was expressed over the large adverse impacts that could occur if an OCS aquaculture facility were destroyed during a hurricane, releasing all the aquaculture fish, feed, debris and chemicals into the ocean. The mingling of a large number of aquaculture fish with wild fish is of particular concern with respect to potentially disastrous changes in the existing ecosystems.

Siting of aquaculture facilities should be done carefully to avoid or minimize impacts. One commenting group stated that no use of offshore energy facilities for aquaculture should be authorized until one or several federal agencies develop a comprehensive regulatory structure to handle the concerns posed by off-shore aquaculture. It was stated that MMS does not have the authority to release existing lessees from their decontamination & decommissioning requirements.

The reuse of existing oil platforms for any purpose was supported by one commentor, because the removal of the platforms would have the adverse impact of removing habitat for benthic organisms, and thereby negatively impacting fisheries.

An additional suggested alternate use of the facilities was as a location for homeland security monitoring devices. The need for a site-specific EIS for each alternate use project was sited by some commentors.

4 INTERAGENCY COOPERATION AND GOVERNMENT-TO-GOVERNMENT CONSULTATION

One request to participate as a cooperating agency was received from the U.S. Coast Guard. The MMS is in the process of communicating with all Federal agencies that may have an interest in or responsibility related to the renewable energy program or alternate use of existing structures. The MMS is reaching out to potentially impacted tribes through various tribal organizations such as the National Congress of American Indians, and the MMS will continue to interact with interested government agencies as the PEIS process moves forward.

5 FUTURE OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Scoping is the first phase of public involvement under the NEPA process. The public will have additional opportunities in the future to be involved in the preparation of the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS*. The next phase of public involvement will involve public review and comment on the Draft PEIS. At this time, the MMS anticipates releasing the Draft PEIS for public review in February 2007; a 60-day comment period will be provided. The public also will have an opportunity to review and comment on the Final PEIS when it is published. There will be a minimum 30-day waiting period before the Record of Decision is issued.

Information about all opportunities for public involvement in the *Outer Continental Shelf Renewable Energy and Alternate Use PEIS*, including announcements of public meetings and releases of documents for review, will be maintained on the project Web site (http://ocsenergy.anl.gov/index.cfm). Individuals seeking e-mail notification of such opportunities can sign up for e-mail announcements.